CLAIM SET AS AMENDED:

- 1. (Canceled)
- 2. (Currently Amended) The A motor-assisted drive unit of claim 1, for a vehicle, comprising:

a motor disposed in a casing having a shaft for providing power to a drive wheel of the vehicle; and

a first control board on which control devices of said motor are mounted, the first control board being arranged substantially perpendicularly to the shaft of said motor, the first control board having a substantially flat surface facing away from said motor,

the flat surface being directly attached to an inner wall of the casing, at least part of the first control board extending to a position overlapped with said motor, said first control board having a first region overlapped with said motor, and a second region not overlapped with said motor, further comprising; and

a second control board having a first region overlapped with said motor, a second region not overlapped not overlapped with said motor, and a processing unit mounted on a first region of the second control board, said processing unit being one of the control devices.

- 3. (Previously Presented) The A motor-assisted drive unit of claim 1, for a vehicle, comprising:
- a motor disposed in a casing having a shaft for providing power to a drive wheel of the vehicle; and

a first control board on which control devices of said motor are mounted, the first

control board being arranged substantially perpendicularly to the shaft of said motor, the first

control board having a substantially flat surface facing away from said motor,

the flat surface being directly attached to an inner wall of the casing, at least part of

the first control board extending to a position overlapped with said motor, said first control

board having a first region overlapped with said motor, and a second region not overlapped

with said motor; and

a second control board having a first region overlapped with said motor, a second

region not overlapped with said motor, and a processing unit mounted on a first region of the

second control board, said processing unit being one of the control devices,

wherein an area of the first region of the first control board overlapped with said

motor is smaller than an area of the second region not overlapped with said motor.

4. (Currently Amended) The motor-assisted drive unit of claim 3, wherein the a

second control board is elastically supported in the casing.

5. (Previously Presented) The motor-assisted drive unit of claim 3, further

comprising:

a thermally conductive board provided on a casing side of the first control board; and

a semiconductor device mounted on said thermally conductive board,

wherein the control devices of said motor are mounted on two surfaces of the control

board.

 Appl. No. 09/675,057
 Docket No. 0505-0692P

 Amendment dated August 3, 2004
 Group Art Unit: 2834

Amendment dated August 3, 2004
Reply to Office Action dated March 29, 2004

Page 4 of 10

6. (Previously Presented) The motor-assisted drive unit of claim 5, wherein at least

part of the thermally conductive board abuts the semiconductor device.

7. (Original) The motor-assisted drive unit of claim 6, wherein at least a part of the

thermally conductive board is in contact with the casing.

8. (Previously Presented) A motor-assisted drive unit for a motor-assisted vehicle,

comprising:

a motor for providing power to a drive wheel of the vehicle;

a first control board having at least one control device mounted thereon; and

a second control board having at least one control device mounted thereon, wherein

the first and second control boards extend in a direction substantially perpendicular to a

motor shaft of the motor, said second control board having a surface larger than a surface of

the first control board and entirely overlapping the first control board, said first control

board having a first region overlapped with said motor, and a second region not overlapped

with said motor.

9. (Previously Presented) The motor-assisted drive unit of claim 8, the motor and the

first and the second control boards being disposed in a casing.

Appl. No. 09/675,057 Docket No. 0505-0692P Group Art Unit: 2834

Amendment dated August 3, 2004

Reply to Office Action dated March 29, 2004 Page 5 of 10⁻¹

10. (Previously Presented) The motor-assisted drive unit of claim 8, wherein the at

least one control device mounted on the second control board includes at least one of a

control processor, a capacitor, and a relay.

11. (Previously Presented) The motor-assisted drive unit of claim 10, wherein the at

least one control device mounted on the first control board includes transistor.

12. (Previously Presented) The motor-assisted drive unit of claim 10, wherein the

second control board is a printed wiring board, and the first control board is a metal board.

13. (Previously Presented) The motor-assisted drive unit of claim 12, wherein the

first control board includes aluminum.

14. (Previously Presented) The motor-assisted drive unit of claim 8, the motor and

the first and the second control boards being disposed in the casing, the first control board

having a substantially flat surface facing away from the motor, the flat surface being directly

attached to an inner wall surface of the casing, and the second control board being disposed

over the first control board, with a gap disposed between the first control board and the

second control board.

Docket No. 0505-0692P Group Art Unit: 2834

Appl. No. 09/675,057

Amendment dated August 3, 2004

Reply to Office Action dated March 29, 2004

Page 6 of 10

15. (Previously Presented) The motor-assisted drive unit of claim 4, wherein the

second control board is elastically supported by an annular rubber member disposed around a

casing boss portion of the motor shaft.

16. (Previously Presented) The motor-assisted drive unit of claim 15, wherein the

rubber member is compressed between the second control board and a motor supporting

portion of the casing.

17. (Canceled)

18. (Currently Amended) The A motor-assisted drive unit of claim 1, for a vehicle,

comprising:

a motor disposed in a casing having a shaft for providing power to a drive wheel of

the vehicle; and

a first control board on which control devices of said motor are mounted, the first

control board being arranged substantially perpendicularly to the shaft of said motor, the first

control board having a substantially flat surface facing away from said motor,

the flat surface being directly attached to an inner wall of the casing, at least part of

the first control board extending to a position overlapped with said motor, said first control

board having a first region overlapped with said motor, and a second region not overlapped

with said motor,

Appl. No. 09/675,057 Docket No. 0505-0692P Group Art Unit: 2834

Amendment dated August 3, 2004

Reply to Office Action dated March 29, 2004 Page 7 of 10

wherein the a second control board is elastically supported in a casing of the motor by

a circular rubber ring fitted into a circular hole of the control board.

19. (Previously Presented) The motor-assisted drive unit of claim 8, wherein the

second control board is elastically supported in a casing of the motor by a circular rubber

ring fitted into a circular hole of the control board.

20. (Previously Presented) A motor-assisted drive unit for a motor-assisted vehicle,

comprising:

a motor for providing power to a drive wheel of the vehicle;

a first control board having at least one control device mounted thereon; and

a second control board having at least one control device mounted thereon,

wherein the first and second control boards extend in a direction substantially

perpendicular to a motor shaft of the motor, said second control board overlapping with at

least a part of the first control board, said first control board having a first region overlapped

with said motor, and a second region not overlapped with said motor,

wherein one of the at least one control device on each of the control boards is

mounted so as not to overlap with the motor.